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File: USPT

May 13, 2003

US-PAT-NO: 6562618

DOCUMENT-IDENTIFIER: US 6562618 B1

TITLE: Monoclonal antibody against connective tissue growth factor and medicinal uses thereof

DATE-ISSUED: May 13, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
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Tezuka; Katsunari	Kanagawa			JP
Sakamoto; Shinji	Kanagawa			JP
Takigawa; Masaharu	Okayama			JP

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[530/387.3](#), [530/388.15](#), [530/388.24](#), [530/391.1](#), [530/391.3](#)

## CLAIMS:

What is claimed is:

1. A non-human monoclonal antibody or a portion thereof selected from the group consisting of F(ab')<sub>2</sub>, Fab, Fab', Fv, sFv, dsFv and dAb, which (a) binds to human, mouse and rat connective tissue growth factors (CTGFs) and (b) has the IgG isotype.
2. The non-human monoclonal antibody or a portion thereof according to claim 1, wherein said antibody inhibits the binding of human CTGF to human kidney-derived fibroblast cell line 293-T (ATCC CRL 1573).
3. The non-human monoclonal antibody or a portion thereof according to claim 1, wherein said antibody is a mouse, rat or hamster antibody.
4. The non-human monoclonal antibody or a portion thereof according to claim 3, wherein said antibody inhibits the binding of human CTGF to human kidney-derived fibroblast cell line 293-T (ATCC CRL 1573).
5. A non-human monoclonal antibody which is produced by a hybridoma identified by international deposit accession numbers selected from the group consisting of FERM BP-6208 and FERM BP-6209.
6. A cell producing the non-human monoclonal antibody according to claim 1.
7. The cell according to claim 6, wherein said cell is a hybridoma obtained by fusing a mammalian myeloma cell with a mammalian B cell that produces the non-human monoclonal antibody.
8. A cell identified by international deposit accession numbers selected from the group consisting of FERM BP-6208 and FERM BP-6209.
9. An antibody-immobilized insoluble carrier comprising the non-human monoclonal antibody

according to claim 1 or claim 5.

10. The non-human antibody-immobilized insoluble carrier according to claim 9, wherein said insoluble carrier is selected from the group consisting of plates, test tubes, tubes, beads, balls, filters and membranes.

11. The non-human antibody-immobilized insoluble carrier according to claim 9, wherein said insoluble carrier is a filter or membrane, for affinity column chromatography.

12. A labeled antibody comprising the non-human monoclonal antibody or a portion thereof according to claim 1 or the non-human monoclonal antibody according to claim 5 that is labeled with a labeling agent that provides a detectable signal.

13. The labeled non-human antibody according to claim 12, wherein said labeling agent is an enzyme, fluorescent substance, chemiluminescent substance, biotin, avidin, or radioisotope.

14. A kit for detecting or assaying mammalian CTGF, comprising the non-human monoclonal antibody or a portion thereof according to claim 1 or the non-human monoclonal antibody according to claim 5.

15. A kit for detecting or assaying mammalian CTGF comprising an antibody-immobilized insoluble carrier which comprises the non-human monoclonal antibody according to claim 1 or claim 5.

16. A kit for detecting or assaying mammalian CTGF comprising a labeled antibody which comprises the non-human monoclonal antibody or a portion thereof according to claim 1 or the non-human monoclonal antibody according to claim 5 that is labeled with a labeling agent that provides a detectable signal.

17. A kit for purifying mammalian CTGF, comprising an antibody-immobilized insoluble carrier which comprises the non-human monoclonal antibody according to claim 1 or claim 5.

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Takigawa; Masaharu	Okayama			JP

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FIELD-OF-SEARCH: 530/388.15, 530/388.24, 530/391.1, 530/391.3, 530/387.3, 435/326, 435/346, 435/70.21, 435/810, 435/328, 424/133.1, 424/135.1, 424/145.1

PRIOR-ART-DISCLOSED:

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> <u>5408040</u>	April 1995	Grotendorst et al.	
<input type="checkbox"/> <u>5783187</u>	July 1998	Grotendorst et al.	
<input type="checkbox"/> <u>6107049</u>	August 2000	Allard et al.	
<input type="checkbox"/> <u>6175057</u>	January 2001	Mucke et al.	

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FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
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